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(54) SMALL-SIZED TOTAL ANALYSIS SYSTEM

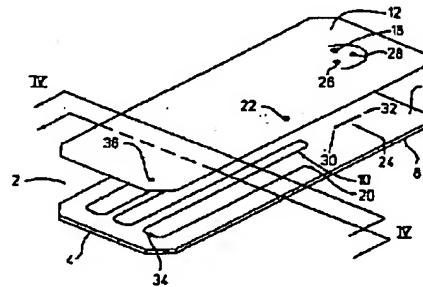
(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a small-sized column device by composing a substrate of a material selected to avoid the inherent chemical activity and instability of pH thereby substantially laser cutting a flat, substrate.

SOLUTION: The small-sized total analysis system comprises a small-sized column device 2, i.e., a substrate 4 having substantially flat first and second surfaces 6, 8 facing each other. The substrate 4 has a first microchannel 10 made by laser cutting the surface 6 and composed of a material other than silicon or silicon dioxide. The system comprises the substrate 4 where the channel 10 has at least two sample treating regions 202, 204, 206-220, and a cover plate 12 disposed on the surface 6 thereof and combined with the

channel 10 to form a first sample treating section 14. Each region 202-220 is provided with at least one inlet port 18 and outlet port 22 for communicating through fluid with the sample treating elements (214, 216-220) thence with the cover plate 12 defining the elements 202-212 and the section 14 thus passing the fluid from an external fluid source through the section 14.

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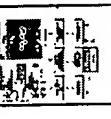
⑧ Title:

Fully integrated miniaturised liquid sample handling and analysis device for liquid phase analysis of small or macromolecular solutes - uses laser ablation of microchannel into surface of planar substrate with channel covered to form sample processing compartment [Derwent Record]

⑧ Country:

JP Japan
A

High Resolution



⑧ Inventor:

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⑧ IPC Code:

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⑧ Priority Number:

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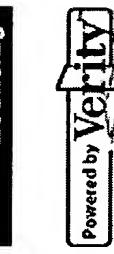
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